Join the Baltimore-Washington Chapter of the Health Physics Society

**Wednesday, January 16, 2019**

**Overview of the Russian Health Studies Program and Summary of Key Research Findings**

*Barrett Fountos*

*Office of Domestic and International Health Studies, U.S. Department of Energy*

**Location:**
Positano Ristorante
4948 Fairmont Ave, Bethesda, MD 20814
301-654-1717
http://www.epositano.com

**Agenda:**
6 pm Social hour, cash bar
7 pm Dinner
8 pm Speaker

**Menu:**
- Appetizers (Meatballs, Crostini with Red Pepper Spread, Caprese Bites), House Salad
- Choice of Entrée (Eggplant Parmigiana, Salmon Filet, Meat Lasagna)
- Dessert Table (Tiramisu, Rum Cake, Black Forest Cake)
- Beverages (Hot tea, Coffee, Iced Tea, Sodas)

**Cost:**
- $30 members, $35 non-members, $10 students

**RSVP:**
Requested by Noon, January 15
Register online at [https://bwchps.wildapricot.org/event-3146273](https://bwchps.wildapricot.org/event-3146273)
or email Dan Blumenthal at bwchps.meetings@gmail.com

**Parking:**
Street and garage parking is available near the restaurant. We recommend using Garage 11 – Woodmont Corner Garage located at 7730 Woodmont Ave (also has entrance on Old Georgetown Rd).

**Metro:**
Bethesda station (Red Line) is approximately 0.3 miles away.
Abstract
For 26 years, the Department of Energy’s (DOE) Russian Health Studies Program has been a leader in the field of radiation health effects research. The Program’s purpose is to assess worker and public health risks from occupational and environmental exposure to ionizing radiation resulting from nuclear weapons production activities in the former Soviet Union. The Program’s goals are to: (1) clarify the relationship between health effects and chronic, low-to-medium dose radiation exposure; (2) estimate the cancer risks from exposure to gamma, neutron, and alpha radiation; and (3) provide information to the national and international organizations that determine radiation protection standards and practices. The research is conducted under the authority of the Joint Coordinating Committee for Radiation Effects Research (JCCRER), a bi-national committee representing Federal Agencies in the United States and the Russian Federation. Signed in 1994, the JCCRER Agreement provided the legal framework for the collaborative research between U.S. and Russian scientists to determine the risks associated with working at, or living near, Russian former nuclear weapons production sites. The products of the Program are peer-reviewed publications on cancer risk estimates from worker and community exposures to ionizing radiation following the production of nuclear weapons in Russia. As of December 31, 2017, JCCRER researchers have published 342 peer-reviewed publications. To date, the research has focused on the Mayak Production Association (Mayak) in Ozersk, Russia, which is the site of the first Soviet nuclear weapons production facility, and people in surrounding communities along the Techa River. The five current projects in the Program include: two radiation epidemiology studies; two historical dose reconstruction studies; and a worker biorepository. National and international standard-setting organizations use cancer risk estimates computed from epidemiological and historical dose reconstruction studies to validate or revise radiation protection standards. An overview of the most important research results will be presented. Five key conclusions have emerged: 1) JCCRER studies of Mayak workers and Techa River populations are valuable because both cancer and non-cancer effects have been observed; 2) the Mayak worker cohort provides confirmatory evidence of bone, lung, and liver cancer in humans; 3) radiation effects following exposure to plutonium appear to be linear; 4) radiation effects are commensurate with those from the Japanese Atomic Bomb Survivors Study; 5) contrary to expectations, doses delivered at low dose rates appear to be as effective in producing cancer as doses delivered at high dose rates.

About the Speaker
Barrett N. (Barry) Fountos has 39 years of public and private sector experience in occupational and environmental epidemiology. Mr. Fountos received his Bachelor’s degree in Biology, cum laude, from Case Western Reserve University in Cleveland, Ohio, and his Master’s degree in Preventive Medicine from the Ohio State University in Columbus, Ohio, where he majored in epidemiology and minored in biostatistics. Since 2002, Mr. Fountos has managed the Department of Energy’s (DOE) Russian Health Studies Program, which assesses worker and public health risks from the former production of nuclear weapons in Russia. This work is conducted under the auspices of the Joint Coordinating Committee for Radiation Effects Research (JCCRER) Agreement of 1994 between the United States and the Russian Federation. The Agreement provides the legal framework for U.S. and Russian scientists to collaborate on radiation health effects research projects at former Soviet nuclear weapons production facilities. To date, the research has focused on the workers from the Mayak Production Association (Mayak), the first Soviet nuclear weapons production facility, which is located in Ozersk, Russia, and on the residents from surrounding communities. Currently, there are 5 projects in the Program: a cancer morbidity and mortality study in the Techa River cohort and companion historical dose reconstruction study, a cancer mortality study in the Mayak worker cohort and companion historical dose reconstruction study, and a Russian radiobiological tissue repository of Mayak workers. In his capacity as Program Manager, Mr. Fountos manages approximately 15 U.S. and 150 Russian scientific and technical personnel. Previously, he managed DOE’s radiation health effects research programs in Belarus and Ukraine (Chernobyl) and in Spain (Palomares). Earlier in his career, Mr. Fountos developed health regulations at the Occupational Safety and Health Administration to protect workers from exposure to toxic substances and at the Environmental Protection Agency to test existing products for adverse health effects. He also worked in 3 different consulting firms in the Washington, DC Metro area, where he evaluated epidemiological studies for use in quantitative health risk assessments and Federal regulations. Mr. Fountos is a Member of the American Public Health Association, the Health Physics Society, and the International Society for Biological and Environmental Repositories.